

ROBUST STEERING-PULL TORQUE COMPENSATION

ABSTRACT

[0029] A controller (32) for a vehicular system (10) that includes a hand-wheel (16) and an electric motor (34) includes a torque-assist function (56) responsive to a signal representing the torque applied to the hand-wheel (16) for providing a torque-assist command to the motor (34), and a steering-pull compensator (52) responsive to a signal representing a valid ignition cycle for modifying the torque-assist command to the motor (34) by an offset corresponding to a detected steering-pull condition; where the method of control includes receiving the signal indicative of the torque applied to the hand-wheel (16), providing a torque-assist command to the motor (34) in response to the received torque signal, detecting an enabling signal related to the signal representing a valid ignition cycle, quantifying a steering-pull condition in response to the received and detected signals, and modifying the torque-assist command to the motor (34) by an offset corresponding to the quantified steering-pull condition.